

## **GERAMY publication list**

### **MAK33 antibody light chain amyloid fibrils are similar to oligomeric precursors**

PLoS One. 2017 Jul 26;12(7):e0181799. doi: 10.1371/journal.pone.0181799. eCollection 2017.

Manuel Hora, Riddhiman Sarkar, Vanessa Morris, Kai Xue, Elke Prade, Emma Harding, Johannes Buchner, Bernd Reif

### **Novel recurrent chromosomal aberrations detected in clonal plasma cells of light chain amyloidosis patients show potential adverse prognostic effect: first results from a genome-wide copy number array analysis**

Haematologica. 2017 Mar 24. pii: haematol.2016.160721. doi: 10.3324/haematol.2016.160721.

[Epub ahead of print] Granzow M, Hegenbart U, Hinderhofer K, Hose D, Seckinger A, Bochtler T, Hemminki K, Goldschmidt H, Schönland SO, Jauch A

### **Epigallocatechin-3-gallate preferentially induces aggregation of amyloidogenic immunoglobulin light chains**

Sci Rep. 2017 Jan 27;7:41515

Manuel Hora, Martin Carballo-Pacheco, Benedikt Weber, Vanessa K. Morris, Antje Wittkopf, Johannes Buchner, Birgit Strodel & Bernd Reif

### **Aggregation of Full Length Immunoglobulin Light Chains from AL Amyloidosis Patients Is Remodeled by Epigallocatechin-3-gallate**

J Biol Chem. 2016 Dec 28. pii: jbc.M116.750323

Andrich K, Hegenbart U, Kimmich C, Kedia N, Bergen HR 3rd, Schönland S, Wanker EE, Bieschke J.

### **Polymorphism of Amyloid Fibrils In Vivo**

Angew Chem Int Ed Engl. 2016 Apr 4;55(15):4822-5

Annamalai K, Gührs KH, Koehler R, Schmidt M, Michel H, Loos C, Gaffney PM, Sigurdson CJ, Hegenbart U, Schönland S, Fändrich M.

### **Polymorphism of Amyloid Fibrils In Vivo**

Angew. Chem. Int. Ed. 2016, 55, 1 – 5

Karthikeyan Annamalai, Karl-Heinz Gührs, Rolf Koehler, Matthias Schmidt, Henri Michel, Cornelia Loos, Patricia M. Gaffney, Christina J. Sigurdson, Ute Hegenbart, Stefan Schönland, and Marcus Fändrich

### **Translocation t(11;14) Is Associated With Adverse Outcome in Patients With Newly Diagnosed AL Amyloidosis When Treated With Bortezomib-Based Regimens**

J Clin Oncol. 2015 Mar 16. pii: JCO.2014.57.4947. [Epub ahead of print]

Bochtler T1, Hegenbart U1, Kunz C1, Granzow M1, Benner A1, Seckinger A1, Kimmich C1, Goldschmidt H1, Ho AD1, Hose D1, Jauch A1, Schönland SO2.

### **A staging system for renal outcome and early markers of renal response to chemotherapy in AL amyloidosis**

Blood. 2014 Oct 9;124(15):2325-32. doi: 10.1182/blood-2014-04-570010. Epub 2014 Aug 12

Giovanni Palladini, Ute Hegenbart, Paolo Milani, Christoph Kimmich, Andrea Foli, Anthony D. Ho, Marta Vidus Rosin, Riccardo Albertini, Remigio Moratti, Giampaolo Merlini, Stefan Schönland

### **Protein Structure and Folding: A Residue-specific Shift in Stability and Amiloidogenicity of Antibody Variable Domains**

J. Biol. Chem. published online August 5, 2014

Cardine N. Nokwe, Martin Zacharias, Hisashi Yagi, Manuel Hora, Bernd Reif, Yuji Goto and Johannes Buchner

**Natural compounds may open new routes to treatment of amyloid diseases.**

Neurotherapeutics. 2013 Jul;10(3):429-39. doi: 10.1007/s13311-013-0192-7.

Bieschke, J.

**Gain of chromosome 1q21 is an independent adverse prognostic factor in light chain amyloidosis patients treated with melphalan/dexamethasone.**

Amyloid. 2014 Mar;21(1):9-17. doi: 10.3109/13506129.2013.854766. Epub 2014 Jan 23.

Bochtler T1, Hegenbart U, Kunz C, Benner A, Seckinger A, Dietrich S, Granzow M, Neben K, Goldschmidt H, Ho AD, Hose D, Jauch A, Schönland SO.

**Surface adsorption considerations when working with amyloid fibrils in multiwell plates and Eppendorf tubes.**

Protein Sci. 2013 Nov;22(11):1531-41.

Murray AN, Palhano FL, Bieschke J, Kelly JW.

**Natural compounds may open new routes to treatment of amyloid diseases.**

Neurotherapeutics. 2013 Jul;10(3):429-39. doi: 10.1007/s13311-013-0192-7.

Bieschke J.

**Counting unstained, confluent cells by modified bright-field microscopy.**

Biotechniques. 2013 Jul;55(1):28-33.

Drey LL, Gruber MC, Bieschke J.

**Macroglossia as the only presenting feature of amyloidosis due to MGUS.**

Eur J Haematol. 2013 Jun 26. doi: 10.1111/ejh.12163.

Tsourdi E, Därr R, Wieczorek K, Röcken C, Ehehalt F, Conrad K, Platzbecker U, Hofbauer LC.

**Proton-Detected Solid-State NMR Spectroscopy at Aliphatic Sites: Application to Crystalline Systems.**

Acc Chem Res. 2013 Jun 7. [Epub ahead of print]

Asami S, Reif B.

**Aggregation of polyQ-extended proteins is promoted by interaction with their natural coiled-coil partners.**

Bioessays. 2013 Jun;35(6):503-7. doi: 10.1002/bies.201300001. Epub 2013 Mar 11.

Petrakis S, Schaefer MH, Wanker EE, Andrade-Navarro MA.

**Hydrogen bonding involving side chain exchangeable groups stabilizes amyloid quaternary structure.**

Phys Chem Chem Phys. 2013 May 30. [Epub ahead of print]

Agarwal V, Linser R, Dasari M, Fink U, Del Amo JM, Reif B.

**Familial primary localized cutaneous amyloidosis with an oncostatin M receptor- $\beta$  mutation, Pro694Leu.**

Clin Exp Dermatol. 2013 May 20. doi: 10.1111/ced.12160

Schreml S, Weber BH, Schröder J, Siegmund H, Schaller J, Vogt T, Landthaler M, Schönbuchner I, Röcken C, Babilas P.

**Skeletal scintigraphy indicates disease severity of cardiac involvement in patients with senile systemic amyloidosis.**

Int J Cardiol. 2013 Apr 5;164(2):179-84

Kristen AV, Haufe S, Schönland SO, Hegenbart U, Schnabel PA, Röcken C, Hardt S, Lohse P, Ho AD, Haberkorn U, Dengler TJ, Altland K, Katus HA.

**Experimental determination of microsecond reorientation correlation times in protein solutions.**

J Phys Chem B. 2013 Apr 4;117(13):3548-53. doi: 10.1021/jp312561f. Epub 2013 Mar 25.

Ravera E, Parigi G, Mainz A, Religa TL, Reif B, Luchinat C.

**A Y2H-seq approach defines the human protein methyltransferase interactome.**  
Nat Methods. 2013 Apr;10(4):339-42. doi: 10.1038/nmeth.2397. Epub 2013 Mar 3.

Weimann M, Grossmann A, Woodsmith J, Özkan Z, Birth P, Meierhofer D, Benlasfer N, Valovka T, Timmermann B, Wanker EE, Sauer S, Stelzl U.

**ATTR amyloid in the carpal tunnel ligament is frequently of wildtype transthyretin origin.**  
Amyloid. 2013 Mar;20(1):1-6.  
Giova Z, Urban P, Meliss RR, Haag J, Axmann HD, Siebert F, Beckner K, Radtke HG, Röcken C.

**Dynamic circadian protein-protein interaction networks predict temporal organization of cellular functions.**

PLoS Genet. 2013 Mar;9(3):e1003398. doi: 10.1371/journal.pgen.1003398. Epub 2013 Mar 28.  
Wallach T, Schellenberg K, Maier B, Kalathur RK, Porras P, Wanker EE, Futschik ME, Kramer A.

**Epigallocatechin-3-gallate: a useful, effective and safe clinical approach for targeted prevention and individualised treatment of neurological diseases?**

EPMA J. 2013 Feb 18;4(1):5. doi: 10.1186/1878-5085-4-5.  
Mähler A, Mandel S, Lorenz M, Ruegg U, Wanker EE, Boschmann M, Paul F.

**Development and application of a DNA microarray-based yeast two-hybrid system.**

Nucleic Acids Res. 2013 Feb 1;41(3):1496-507. doi: 10.1093/nar/gks1329. Epub 2012 Dec 28.  
Suter B, Fontaine JF, Yildirimman R, Raskó T, Schaefer MH, Rasche A, Porras P, Vázquez-Álvarez BM, Russ J, Rau K, Foulle R, Zenkner M, Saar K, Herwig R, Andrade-Navarro MA, Wanker EE.

**Protein-RNA interfaces probed by <sup>1</sup>H-detected MAS solid-state NMR spectroscopy.**

Angew Chem Int Ed Engl. 2013 Feb 18;52(8):2345-9. doi: 10.1002/anie.201208024. Epub 2013 Jan 18.  
Asami S, Rakwalska-Bange M, Carlomagno T, Reif B.

**Translation of HTT mRNA with expanded CAG repeats is regulated by the MID1-PP2A protein complex.**

Nat Commun. 2013;4:1511. doi: 10.1038/ncomms2514.  
Krauss S, Griesche N, Jastrzebska E, Chen C, Rutschow D, Achmüller C, Dorn S, Boesch SM, Lalowski M, Wanker E, Schneider R, Schweiger S.

**A functional deficiency of TERA/VCP/p97 contributes to impaired DNA repair in multiple polyglutamine diseases.**

Nat Commun. 2013;4:1816. doi: 10.1038/ncomms2828.  
Fujita K, Nakamura Y, Oka T, Ito H, Tamura T, Tagawa K, Sasabe T, Katsuta A, Motoki K, Shiwaku H, Sone M, Yoshida C, Katsuno M, Eishi Y, Murata M, Taylor JP, Wanker EE, Kono K, Tashiro S, Sobue G, La Spada AR, Okazawa H.

**New Criteria for Response to Treatment in Immunoglobulin Light Chain Amyloidosis Based on Free Light Chain Measurement and Cardiac Biomarkers: Impact on Survival Outcomes.**

J Clin Oncol. 2012 Oct 22.  
Palladini G, Dispenzieri A, Gertz MA, Kumar S, Wechalekar A, Hawkins PN, Schönland S, Hegenbart U, Comenzo R, Kastritis E, Dimopoulos MA, Jaccard A, Klfersy C, Merlini G.

**Optimal degree of protonation.**

J Biomol NMR. 2012 Oct;54(2):155-68. Epub 2012 Aug 23. PubMed PMID: 22915373.  
Asami S, Szekely K, Schanda P, Meier BH, Reif B.

**Longitudinal left ventricular function for prediction of survival in systemic light-chain amyloidosis: incremental value compared with clinical and biochemical markers.**

J Am Coll Cardiol. 2012 Sep 18;60(12):1067-76. doi: 10.1016/j.jacc.2012.04.043. Epub 2012 Aug 8.  
Buss SJ, Emami M, Mereles D, Korosoglou G, Kristen AV, Voss A, Schellberg D, Zugck C, Galuschky C, Giannitsis E, Hegenbart U, Ho AD, Katus HA, Schonland SO, Hardt SE.

**In support of the BMRB.**

Nat Struct Mol Biol. 2012 Sep;19(9):854-60. doi: 10.1038/nsmb.2371. PubMed PMID: 22955930.

Markley JL, Akutsu H, Asakura T, Baldus M, Boelens R, Bonvin A, Kaptein R, Bax A, Bezsonova I, Gryk MR, Hoch JC, Korzhnev DM, Maciejewski MW, Case D, Chazin WJ, Cross TA, Dames S, Kessler H, Lange O, Madl T, Reif B, Sattler M, Eliezer D, Fersht A, Forman-Kay J, Kay LE, Fraser J, Gross J, Kortemme T, Sali A, Fujiwara T, Gardner K, Luo X, Rizo-Rey J, Rosen M, Gil RR, Ho C, Rule G, Gronenborn AM, Ishima R, Klein-Seetharaman J, Tang P, van der Wel P, Xu Y, Grzesiek S, Hiller S, Seelig J, Laue ED, Mott H, Nietlispach D, Barsukov I, Lian LY, Middleton D, Blumenschein T, Moore G, Campbell I, Schnell J, Vakonakis IJ, Watts A, Conte MR, Mason J, Pfuhl M, Sanderson MR, Craven J, Williamson M, Dominguez C, Roberts G, Günther U, Overduin M, Werner J, Williamson P, Blindauer C, Crump M, Driscoll P, Frenkel T, Golovanov A, Matthews S, Parkinson J, Uhrin D, Williams M, Neuhaus D, Oschkinat H, Ramos A, Shaw DE, Steinbeck C, Vendruscolo M, Vuister GW, Walters KJ, Weinstein H, Wüthrich K, Yokoyama S.

**Structural properties of EGCG-induced, nontoxic Alzheimer's disease A $\beta$  oligomers.**

J Mol Biol. 2012 Aug 24;421(4-5):517-24. Epub 2012 Jan 28. PubMed PMID: 22300765.

Lopez del Amo JM, Fink U, Dasari M, Grelle G, Wanker EE, Bieschke J, Reif B.

**Amyloidose in Pneumologie.**

Pneumologie. 2012 Aug;66(8):483-92. Epub 2012 Jun 12. German.

Hagmeyer L, Stieglitz S, Röcken C, Randerath W.

**Identification of human proteins that misfolding and proteotoxicity of pathogenic ataxin-1.**

Petrakis S, Raskó T, Russ J, Friedrich RP, Stroedicke M, Riechers SP, Muehlenberg K, Möller A, Reinhardt A, Vinayagam A, Schaefer MH, Boutros M, Tricoire H, Andrade-Navarro MA, Wanker EE. modify PLoS Genet. 2012 Aug;8(8):e1002897. doi: 10.1371/journal.pgen.1002897.

**Substrate transport activation is mediated through second periplasmic loop of transmembrane protein MalF in maltose transport complex of Escherichia coli.**

J Biol Chem. 2012 May 18;287(21):17040-9.

Jacso T, Schneider E, Rupp B, Reif B.

**Amyloidose des Herzens.**

Der Pathologe. 2012 May;33(3):236-44

Kristen AV, Röcken C.

**Evolution and function of CAG/polyglutamine repeats in protein-protein interaction networks.**

Nucleic Acids Res. 2012 May;40(10):4273-87. doi: 10.1093/nar/gks011. Epub 2012 Jan 28.

Schaefer MH, Wanker EE, Andrade-Navarro MA.

**Phosphorylation-regulated axonal dependent transport of syntaxin 1 is mediated by a Kinesin-1 adapter.**

Chua JJ, Butkevich E, Worseck JM, Kittelmann M, Grønborg M, Behrmann E, Stelzl U, Pavlos NJ,

Lalowski MM, Eimer S, Wanker EE, Klopfenstein DR, Jahn R.

Proc Natl Acad Sci U S A. 2012 Apr 10;109(15):5862-7. doi: 10.1073/pnas.1113819109.

**Ultra-high resolution in MAS solid-state NMR of perdeuterated proteins: implications for structure and dynamics.**

J Magn Reson. 2012 Mar;216:1-12.

Reif B.

**HIPPIE: Integrating protein interaction networks with experiment based quality scores.**

Schaefer MH, Fontaine JF, Vinayagam A, Porras P, Wanker EE, Andrade-Navarro MA.

PLoS One. 2012;7(2):e31826. Epub 2012 Feb 14.

**Immunohistochemistry in the classification of systemic forms of amyloidosis: a systematic investigation of 117 patients.**

2012 Jan 12;119(2):488-93. Epub 2011 Nov 21

Schönland S, Hegenbart U, Bochtler T, Mangatter A, Hansberg O, Ho AD, Lohse P, Röcken C.

**Green Tea Halts Progression of Cardiac Transthyretin Amyloidosis – an Observational Report.**

Clin Res Cardiol 2012;101(10):805-13.

Kristen AV, Lehrke S, Buss S, Mereles D, Steen H, Ehlermann P, Hardt S, Giannitsis E, Schreiner R, Haberkorn U, Schnabel PA, Linke RP, Röcken C, Wanker EE, Dengler TJ, Klaus Altland K, Katus HA.

**The investigation of binary PPIs with the classical yeast two-hybrid (Y2H) approach, Y2H variants, and other in vivo methods for PPI mapping.**

Methods Mol Biol. 2012;812:v-vi. PubMed PMID: 22319789.

Suter B, Wanker EE.

**Deuterated peptides and proteins: structure and dynamics studies by MAS solid-state NMR.**

Methods Mol Biol. 2012;831:279-301. doi: 10.1007/978-1-61779-480-3\_16.

Reif B.

**The role of fluorescence in situ hybridization and gene expression profiling in myeloma risk stratification.**

Srp Arh Celok Lek. 2011 Dec;139 Suppl 2:84-9. PubMed PMID: 22352188.

Hose D, Seckinger A, Jauch A, Rème T, Moreaux J, Bertsch U, Neben K, Klein B, Goldschmidt H.